CLAIMS:

- 1. A process for the preparation of isotonic oil emulsions containing estrogen and progestagen for intravenous administration, comprising the steps of:
 - (A) dissolving at least one of the hormones estrogen and progestagen in an oil phase; and
 - (B) emulsifying the oil phase in the aqueous phase;

in the presence of an emulsifier.

- 2. A hormone-containing isotonic oil emulsion for intravenous administration comprising progestagens and estrogens, obtainable by the process according to claim 1.
- 3. The hormone-containing isotonic oil emulsion for intravenous administration according to claim 2, comprising progestagens and estrogens in a ratio of from 2:1 to 200:1.
- 4. The oil emulsion according to claim 2 or 3, characterized in that the emulsion contains from 1 to 60% by weight of an estrogen and from 1 to 50% by weight of a progestagen, based on the total composition.
- 5. The oil emulsion according to any of claims 2 to 4, characterized in that said estrogen is estradiol and said progestagen is progesterone.
- 6. The oil emulsion according to any of claims 2 to 5, characterized in that said oil phase comprises medium chain triglycerides (MCT) having a chain length of from 6 to 12, preferably from 8 to 10, carbon atoms.
- 7. The oil emulsion according to any of claims 2 to 6, characterized by containing up to 1.5% by weight of the emulsifier, based on the total composition.

- 8. Use of the isotonic oil emulsion according to any of claims 2 to 7 for preparing a medicament for intravenous administration of estrogen and progestagen for postnatal hormone substitution in premature babies.
- 9. Use of the isotonic oil emulsion according to any of claims 2 to 7 for preparing a medicament for the treatment of neurological damage after strokes.
- 10. A process for hormone substitution in premature babies by using the isotonic oil emulsion according to any of claims 2 to 7.
- 11. A process for the treatment of neurological damage after strokes by using the isotonic oil emulsion according to any of claims 2 to 7.